



## PORTABLE SANITATION ASSOCIATION INTERNATIONAL

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Dear Health Inspector:

Since its founding in 1971, the Portable Sanitation Association International and its members located in forty countries throughout the world, have worked diligently to improve not only the environment, but also the sanitary conditions for those using portable restroom facilities.

We have been instrumental in assisting countries, states, counties and communities to adopt (in many cases by reference) mandatory use of appropriate temporary portable restroom facilities when permanent facilities are either not available or inadequate.

I have enclosed for your review a copy of the Portable Restroom Use Breakdown chart, which is based on a University of Missouri Study for the proper number of portable restrooms at mass gatherings / special events. Also enclosed is an estimated breakdown of portable restroom waste collected in parks and recreation areas (population: 350,000 - 400,000).

There is a very real danger of disease transmissions wherever adequate restrooms are not available. At this point, the only hope of eliminating the unsanitary conditions that occur in many areas lies in the hands of responsible local government entities. In spite of the billions of dollars spent every year on improving the infrastructure, there will always be a need for temporary facilities to provide the essential services that belong at all large gatherings and in all workplaces.

In reviewing the needs at special events, authorities such as you must consider the realistic number of people expected at the event. Number of attendees at any special event should not be based on the conservative numbers presented by event coordinators. Unfortunately, by not taking into consideration the health and sanitary needs of those additional attendees, unsanitary conditions prevail. In addition, there is a need to monitor closely the proper maintenance of portable sanitation facilities provided at these events. Requirements should include plans for adequate and timely response to any sanitation and/or health related issues.

We request you review the enclosed information and encourage you to adopt the regulations as provided. If, after your review, we can be of any additional assistance, please do not hesitate to contact our office.

Sincerely,

D. Millicent Carroll  
Industry/Regulatory Standards



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## SPECIAL EVENT EXTENDED CHART BREAKDOWN

(No fixed facilities)

Number of Units required when no pumping service is provided

50/50 Mix of Men & Women

One unit provides approximately 200 uses with 4 hours between uses

Average Crowd Size ↓	Average Hours At the Event									
	→ 1	2	3	4	5	6	7	8	9	10
500	2	4	4	5	6	7	9	9	10	12
1,000	4	6	8	8	9	9	11	12	13	13
2,000	5	6	9	12	14	16	18	20	23	25
3,000	6	9	12	16	20	24	26	30	34	38
4,000	8	13	16	22	25	30	35	40	45	50
5,000	12	15	20	25	31	38	44	50	56	63
10,000	15	25	38	50	63	75	88	100	113	125
15,000	20	38	56	75	94	113	131	150	169	188
20,000	25	50	75	100	125	150	175	200	225	250
25,000	38	69	99	130	160	191	221	252	282	313
30,000	46	82	119	156	192	229	266	302	339	376
35,000	53	96	139	181	224	267	310	352	395	438
40,000	61	109	158	207	256	305	354	403	452	501
45,000	68	123	178	233	288	343	398	453	508	563
50,000	76	137	198	259	320	381	442	503	564	626
55,000	83	150	217	285	352	419	486	554	621	688
60,000	91	164	237	311	384	457	531	604	677	751
65,000	98	177	257	336	416	495	575	654	734	813
70,000	106	191	277	362	448	533	619	704	790	876
75,000	113	205	296	388	480	571	663	755	846	938
80,000	121	218	316	414	512	609	707	805	903	1001
85,000	128	232	336	440	544	647	751	855	959	1063
90,000	136	246	356	466	576	686	796	906	1016	1126
95,000	143	259	375	491	607	724	840	956	1072	1188
100,000	151	273	395	517	639	762	884	1006	1128	1251

Source: Independent Study By: Center of Business and Industrial Studies / University of Missouri-St. Louis

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# **ESTIMATED BREAKDOWN OF PORTABLE RESTROOM WASTE COLLECTED IN PARKS & RECREATION AREAS (POPULATION: 350,000 - 400,000)**

Since it's founding in 1971, the Portable Sanitation Association International and its members have worked diligently to protect our environment and the health, welfare and dignity of those using portable restroom facilities. The provision of restroom facilities is an essential service to all people.

Portable restrooms in the park and recreation system of any state, city, county or municipality **cannot be viewed as a non-essential service**. There is a very real danger of disease transmissions wherever adequate restrooms are not provided.

The following historical information was obtained from PSAI member companies providing portable restroom facilities for the City of Minneapolis.

- ◆ The Park and Recreation Department had as many as 57 portable restrooms and 9 ADA restrooms on rent in the 1/1/01 – 12/21/01 time frame.  
(Records for 2002 were not immediately available).
- ◆ There were 4,459 scheduled services on those restrooms during that time. A service includes the pumping of the tank and cleaning.
- ◆ It is estimated that each time the restroom was serviced the tank was approximately half full (30-40 gallons).
- ◆ The number of scheduled services multiplied by the average # of gallons collected per service ( $4459 \times 30$  gallons = 133,770 gallons) is equal to the gallons of raw sewage removed from the park and recreation units over a period of one year. 2001 was a typical year.
- ◆ It was calculated that 133,770 gallons translates to over two million users of the portable restrooms in the city's park system ( $133,770 \text{ gallons} \times 128 \text{ oz/gal}$  divided by 8 oz) added to the tank with each use.
- ◆ The restrooms provided were used approximately 2,140,320 times.

This amount of human waste collected over a year and the number of uses provided to the public should not be considered a non-essential service.



## The CDC, Hepatitis A and



## the Portable Sanitation Association International

The PSAI office received a call on September 11, 2003 from Dr. Lyn Finelli, Director - Hepatitis Branch for the Center for Disease Control (CDC); Atlanta, Georgia. The CDC's concern is the increase of Hepatitis A among attendees at "Jam Band Concerts" (Grateful Dead, Phish, Dave Matthews Band, etc.).

After reviewing the evaluation reports from state health departments, their studies indicated a dramatic increase of Hepatitis A within the last 36 months.

The CDC has investigated and their conclusion at this time is: Due to the shortage of sanitation facilities (portable and fixed) and little to no handwash facilities, is the larger contributing factor for the Hepatitis A increase. The investigation also indicated that contamination is not from pre-infected individual transference but from on site infection due to lack of proper sanitation facilities creating hand-to-mouth contamination on a large scale.

With the decrease in State budgets for social services (free health clinics), a lack of funding can create an even greater rise in transmission of Hepatitis A.

The CDC's Hepatitis Branch found no acceptable special event sanitation information, except the PSAI Breakdown Chart. The CDC's preliminary calculations are shown to be in-line with those established by the Association.

Dr. Finelli requested permission to post the PSAI Special Event Extended Breakdown Chart on their web site. A Notice of Information was sent to Directors' of Health in each state and US Territories recommending the chart as the CDC guideline for portable sanitation facilities required at special events.

The CDC will refer all inquiries for special event portable sanitation guidelines to the PSAI and Dr. Finelli felt very strongly that, in her opinion, Health Departments would take a stronger stand on requiring adequate portable sanitation facilities, based on PSAI guidelines.